

Appl. No. 10/091,142  
Amdt. dated Nov. 07, 2003  
Reply to Office action of Oct. 08, 2003

**Amendments to the Specification:**

Please delete "Device" at page 1, line 1, add the new word FILTER; delete the words "USED TO" ; add the new word FOR; delete "PURIFY" ; and add the new word PURIFYING;

Please delete "KEEP" at page 1, line 3, add the new word KEEPING; and add the new word A;

Please delete the words "used to" at page 1, line 11, add the new word for; and delete "purify" ;

Please add the new word purifying at page 1, line 13; delete "keep" ; add the new word keeping; and add the new word a;

Please delete "." at page 1, lines 15-17, ; and add the new words which start with , and more particularly to a filter that fits with any shape of duct inlet by the use of a spring means. ;

Please delete "No" at page 1, line 25, and add the new word US;

Please delete "No" at page 1, line 27, add the new word US; and after the word Ogawa add the new word and;

Please delete "No" at page 1, line 29, and add the new word US;

Please delete the paragraph beginning at page 1, lines 35-38, which starts with "As can be seen, the patents do not show a device used to purify air and keep cleanly the duct of hot air system or central air exchanger, which

is installed into the duct inlet inhaling air of the indoor from the house." ;

Please add the new paragraph beginning at page 2, lines 40-42, which starts with It is known to use different conical filters in order to purify air and keep cleanly the ducts of a hot air system or central air exchanger.

Please add the new paragraph beginning at page 2, lines 44-46, which starts with At present, one disadvantage of using conical filters is that none of them fits with any shape of duct inlet.

Please delete "device" at page 2, line 48, and add the new word filter;

Please delete "adapted for" at page 2, line 50, and add the new words which start with that fits with shape of the duct inlet for;

Please add the new words and at page 2, line 52;

Please delete the words at page 2, line 58-68, which start with "The present invention shows a device" ; add the new words which start with In its simplest form, the use of the filter; delete the words which start with "having the shape of a cone, which can be installed" ; add the new words which start with of this invention is that it is mounted; delete the words which start with "into the square, rectangular or round" ; add the new words inside a; delete the words which start with "a fixing means is adapted" ; add the new words fits with any; delete the words "to the" ; delete the words "round, square or rectangular" ; delete "." ; and add the new words which start with by the use of a spring means.;

Please at page 3, lines 73-81, delete the words which start with "device having the shape of cone installed" ; add the new words a filter that is

mounted; delete the words "into the round" ; add the new word inside;  
delete the words "a fixing means is adapted" ; add the new words fits with;  
delete "to" ; add the new word round; delete round; delete "." ; and add the new words which start with by the use of a spring means;  
Please delete the words "a perspective" at page 3, line 83, add the new word an;  
Please delete the words at page 3, lines 83-89, which start with "of device having the shape of cone installed into the round duct inlet inhaling air of the indoor from the house, and which the fixing means is adapted to the shape of round duct inlet" ; and add the new word thereof. ;  
Please delete "device" at page 3, line 91, and add the new words same filter;  
Please delete at page 3, lines 91-92, the words which start with "having the shape of cone installed" ; add the new words that is mounted; delete the words "into the square" ; and add the new words inside a;  
Please delete at page 3, lines 95-99, the words which start with "a fixing means is adapted" ; add the new words fits with; delete "to"; add the new word square; delete "square" ; delete "." ; and add the new words by the use of a spring means;  
Please delete the words "a perspective" at page 3, line 101, and add the new word an;  
Please delete the words at page 3, lines 101-107, which start with "of device having the shape of cone installed into the square duct inlet inhaling air of the indoor from the house, and which the fixing means is adapted to the

shape of square duct inlet" ; and add the new word thereof. ;

Please delete the words at pages 3-4, lines 109-110, which start with "device having the shape of cone installed" ; add the new words same filter that is mounted; delete the words "into the rectangular" ; and add the new words inside a;

Please delete the words at page 4, lines 112-116, which start with "a fixing means is adapted" ; add the new words fits with; delete "to"; add the new word rectangular; delete "rectangular"; delete "." ; and add the new words which start with by the use of a spring means.;

Please delete the words "a perspective" at page 4, lines 118-124, add the new word an; delete the words which start with "of device having the shape of cone installed into the rectangular duct inlet inhaling air of the indoor from the house, and which the fixing means is adapted to the shape of rectangular duct inlet" ; and add the new word thereof.;

Please delete the words "As shown in" at page 4, line 128; add the new words which start with Referring to the; delete the words which start with ", 2, 3, 4, 5 and" ; and add the new words to 6, it may ;

Please add the new words be seen that the at page 4, line 130; delete "a device" ; and add the new words filter (1) of the present invention is;

Please delete the words "to purify air and keep" at page 4, lines 130-132, add the new words for purifying air and keeping cleanly; and add the new word a;

Please delete the words at page 4, lines 134-138, which start with "is made

up of a filter (1) having the shape of a cone, which can be installed" ; add the new words which is mounted; delete the words "into the square, rectangular or round" ; and add the new words inside a;

Please delete the words at page 4, lines 140-144, which start with "a fixing means is adapted" ; add the new words fits with any; delete the words "to the" ; delete the words "round, square or rectangular" ; delete "." ; and add the new words which start with by the use of a spring means. ;

Please delete the paragraph beginning at pages 4-5, lines 146-159, which starts with "As shown in figures 1 and 2, the filter (1) is installed into the round duct inlet inhaling air of the indoor from the house, and which a fixing means (2) is adapted to the shape of round duct inlet. As shown in figures 3 and 4, the filter (1) is installed into the square duct inlet inhaling air of the indoor from the house, and which a fixing means (3) is adapted to the shape of square duct inlet. As shown in figures 5 and 6, the filter (1) is installed into the rectangular duct inlet inhaling air of the indoor from the house, and which the fixing means (3) is adapted to the shape of rectangular duct inlet."

**FILTER FOR PURIFYING AIR AND KEEPING CLEANLY THE  
DUCTS OF A HOT AIR SYSTEM OR CENTRAL AIR  
EXCHANGER.**

**BACKGROUND OF THE INVENTION:**

**1) Field of the invention:**

The present invention relates to a device for purifying air and keeping cleanly the ducts of a hot air system or central air exchanger, and more particularly to a filter that fits with any shape of duct inlet by the use of a spring means.

**2) Description of the related art:**

A search of prior art records has unveiled the following United States patents:

1. US 4,804,392 issued in 1989 to Spengler;
2. US 4,552,657 issued in 1985 to Ogawa; and
3. US 4,666,531 issued in 1987 to Minard.

The patents to Spengler, Ogawa and Minard are probably the most relevant.

It is known to use different conical filters in order to purify air and keep cleanly the ducts of a hot air system or central air exchanger.

At present, one disadvantage of using conical filters is that none of them fits with any shape of duct inlet.

The gist of the invention is therefore to provide a filter that fits with any shape of duct inlet for hot air system or central air exchanger, and which allowing to purify air and keep cleanly the ducts.

#### **SUMMARY OF THE INVENTION:**

In its simplest form, the use of the filter of this invention is that it is mounted inside a duct inlet inhaling air of the indoor from the house, and which fits with any shape of duct inlet by the use of a spring means.

#### **BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S):**

Figure 1 is a perspective view of a filter that is mounted inside a duct inlet inhaling air of the indoor from the house, and which fits with the round shape of duct inlet by the use of a spring means.

Figure 2 is an exploded view thereof.

Figure 3 is a perspective view of same filter that is mounted inside a duct inlet inhaling air of the indoor from the house, and which fits with the square shape of duct inlet by the use of a spring means.

Figure 4 is an exploded view thereof.

Figure 5 is a perspective view of same filter that is mounted inside a duct inlet inhaling air of the indoor from the house, and which fits with the rectangular shape of duct inlet by the use of a spring means.

Figure 6 is an exploded view thereof.

**DETAILED DESCRIPTION OF THE INVENTION:**

Referring to the figures 1 to 6, it may be seen that the filter (1) of the present invention is used for purifying air and keeping cleanly the ducts of a hot air system or central air exchanger, which is mounted inside a duct inlet inhaling air of the indoor from the house, and which fits with any shape of duct inlet by the use of a spring means (2)(3).